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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,365	09/25/2001	Kazumasa Ayukawa	P21475	5941
7055	7590	05/11/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			CHARLES, MARCUS	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 05/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/961,365

Applicant(s)

AYUKAWA ET AL.

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 March 0220.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 7-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

This action responsive to the amendment filed 03-06-2004, which has been entered.

Claims 1-20 are currently pending.

#### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities: In claim 1, line 10, the missed spelt term "tortion" should be --torsion--. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP (05-83516) in view of Katzab (4813,915). JP (05-83516, applicant's prior art) discloses a tensioner comprising a base (20) with a bottom having a tubular shape, a rocking arm (30) having a tubular part (31) rotatably supported inside the base, a pulley (10) attached to the rocking arm, a torsion spring (40) housed in the base and biases the rotation of the rocking arm to tension a belt, wherein the torsion spring is attached concentrically to the axial axis of the base and a friction member (60) interposed between the outer circumference of the tubular part (31) and the inner circumferential surface of the base (20). JP (05-83516 further disclose that the one end (see attached drawing) of the torsion coiled spring (40) is attached to the base and the other end is

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attached to the arm. JP (05-83516) does not disclose that the torsion spring is attached eccentrically to the axial center of the base. Katzab (4813,915) discloses a tensioner with a base (10) arm having a tubular part (8) and an a torsion spring (33) attached eccentrically with the axial center of the base (figs. 5-6) in order to provide a greater biasing forcing in one direction. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tensioner of JP (05-83516) such that the torsion spring is attached eccentrically to the axial center of the base in view of Katzab in order to provide a greater biasing forcing in one direction. It is apparent that a first damping force acting on the arm when the belt is in tension is relatively larger than a second damping force acting on the arm when the belt is slack due to the eccentricity of the spring to the axial center

In claim 2, it is apparent that the rocking arm is removably attached to the base via the fastening assembly (35).

In claim 3, note the friction member (21) interposed between outer circumferential surface of the tubular part of the arm and the inner tubular part base member and the friction member is provided across a range of at least 180° around the axial center of the base.

In claim 4, note the projections (61) provided on the friction member.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP (05-83516) in view of Kotzab. JP (05-83516) does not disclose the magnitude of the first damping force. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify JP (05-83516) so that the magnitude of the first

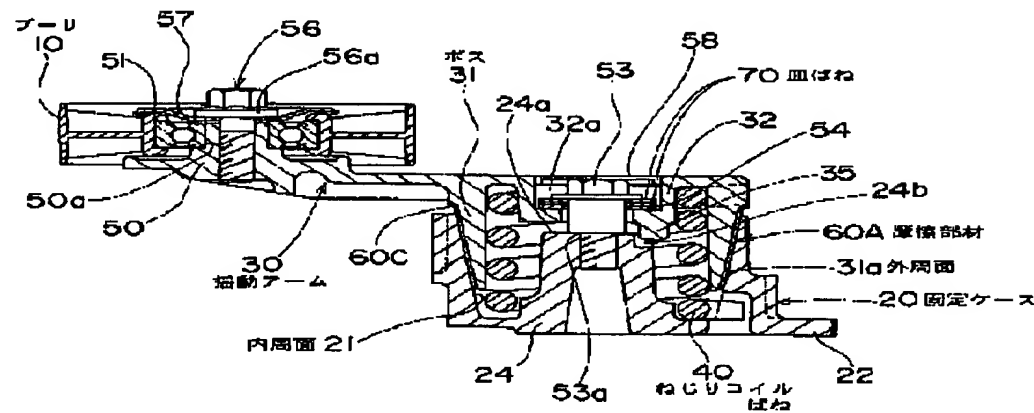
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damping force is 1.5 to 3.5 times that of the second damping force, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205, USPQ 215 (CCPA 1980).

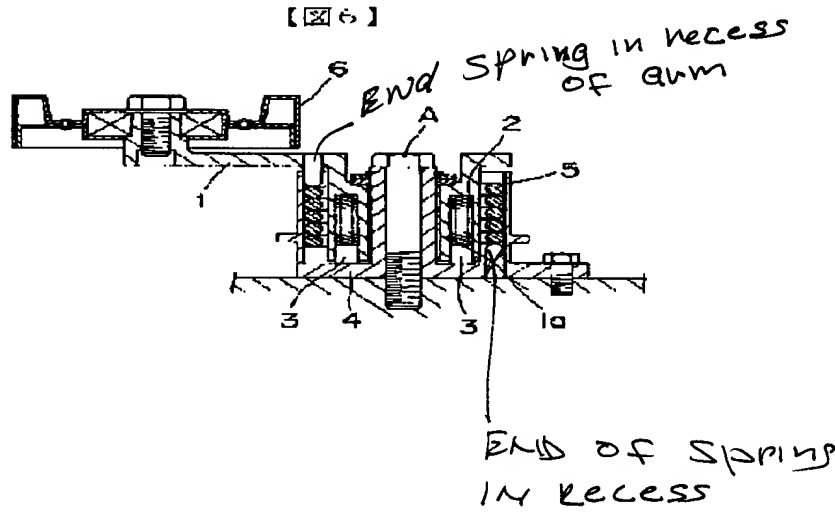
### ***Response to Arguments***

5. Applicant's arguments filed 03-06-2004 have been fully considered but they are not persuasive. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection. Applicant contended that the prior art fails to disclose the torsion coiled spring includes one end that is connected to the base by a recess formed in the bottom of the base and an other end connected to the arm by a recess formed in the bottom of the arm. In response, the new limitation of the amended claim broadly claimed that one end of the coil spring is attached to the base and another end is connected to the rocking arm. As disclosed in the rejection, JP 05-83516) clearly meet the claimed limitation. Figures 1-6, of JP 05-83516) shows the ends of the spring connected to the arm and the base respectively.

【図4】



【図6】




A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (703) 305-6877. The examiner can normally be reached on Monday -Thursday 7:30 am-600 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Marcus Charles  
Primary Examiner  
Art Unit 3682  
May 07, 2004